

**Draft Environmental Assessment**  
**Fleecer Wildlife Management Area**  
**Charcoal Gulch Habitat Project**

**April 2014**

**1.0: PURPOSE OF AND NEED FOR ACTION**

**1.1 Proposed Action**

Montana Department of Fish, Wildlife, and Parks (FWP) proposes to improve habitat conditions on big game winter range in the Charcoal Gulch area of Fleecer WMA. The proposed action would remove competing Douglas-fir trees from approximately 25 acres of aspen and 70 acres of sagebrush-grasslands. In addition, approximately 50 acres of Douglas-fir forest stands would be selectively thinned by 15%. The proposed action is intended to restore productivity to decadent aspen stands by removing competing conifers; reverse the loss of sagebrush habitat caused by encroaching conifers; improve forest health by selectively thinning Douglas-fir stands impacted by insects, disease, and overcrowding; and minimize the threat of wildfire in the area by reducing fuels. Tree removal would be by hand. No new roads would be constructed. This is a non-commercial timber project.

**1.2 Need for the Action**

Fleecer WMA provides important winter range habitat for mule deer and elk as well as year-round habitat for many other wildlife species. The Charcoal Gulch area of Fleecer WMA in particular provides an ecologically important mix of aspen, sagebrush, grassland, and forested habitat that meets the feeding, bedding, security, and thermal cover needs of a variety of wildlife, especially wintering elk and mule deer. The Charcoal Gulch area has been recognized as a key elk winter range, as far back as 35 years, based on a survey report completed by Rogers (1979). Winter surveys conducted annually since then confirm that this is still the case.

Due to climatic factors and land management practices over the past century, a large proportion of shrubland, grassland, and deciduous habitat is being lost to conifer expansion throughout the intermountain west. Comparison of air photos from 1989 to 2011 show that this is happening in the Charcoal Gulch area as well (Figure 1).

Current mule deer populations across Montana are at low levels or in downward trends. To address this on a statewide level, FWP recently eliminated most mule deer doe harvest opportunity, including in Hunting District 319 where this project is proposed. Another management action taken to address low deer populations in this area was to increase the lion quota in 2012, which is still in effect. In addition to managing for predation and hunter harvest of the female segment of the population, sound game management should factor in the condition of important mule deer habitats and implement habitat improvements if appropriate, which is what this project proposes.

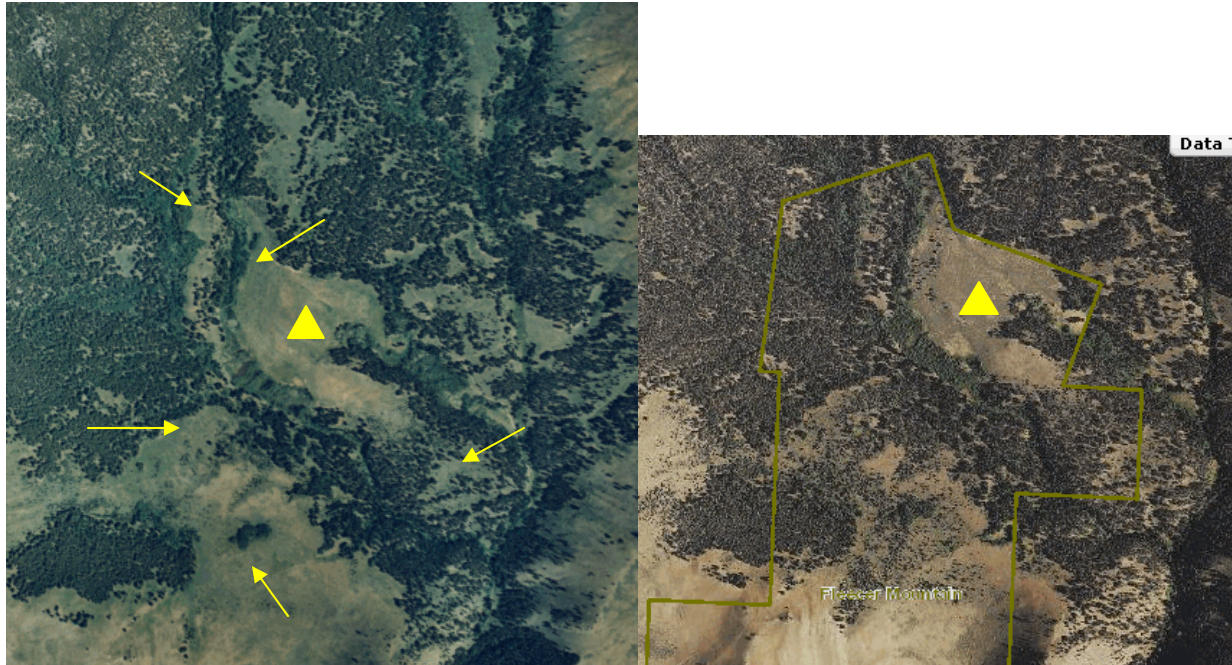


Figure 1: Comparison in Douglas-fir expansion in the Charcoal Gulch area of Fleecer WMA between 1989 (left photo) and 2011 (right photo). The yellow triangle in each photo serves as a landmark for orientation between photos. Yellow arrows identify areas where significant conifer expansion has occurred over the 22-year period. The line in the 2011 photo is the WMA boundary.

## **Location of Project Area**

The Charcoal Gulch area of Fleecer WMA is located approximately 15 miles south of Butte, MT, just west of the town of Divide in Silver Bow County. The proposed project would take place on the WMA in Sections 35 and 36 of T01N, R10W and Sections 1 and 2 of T01S, R10W.

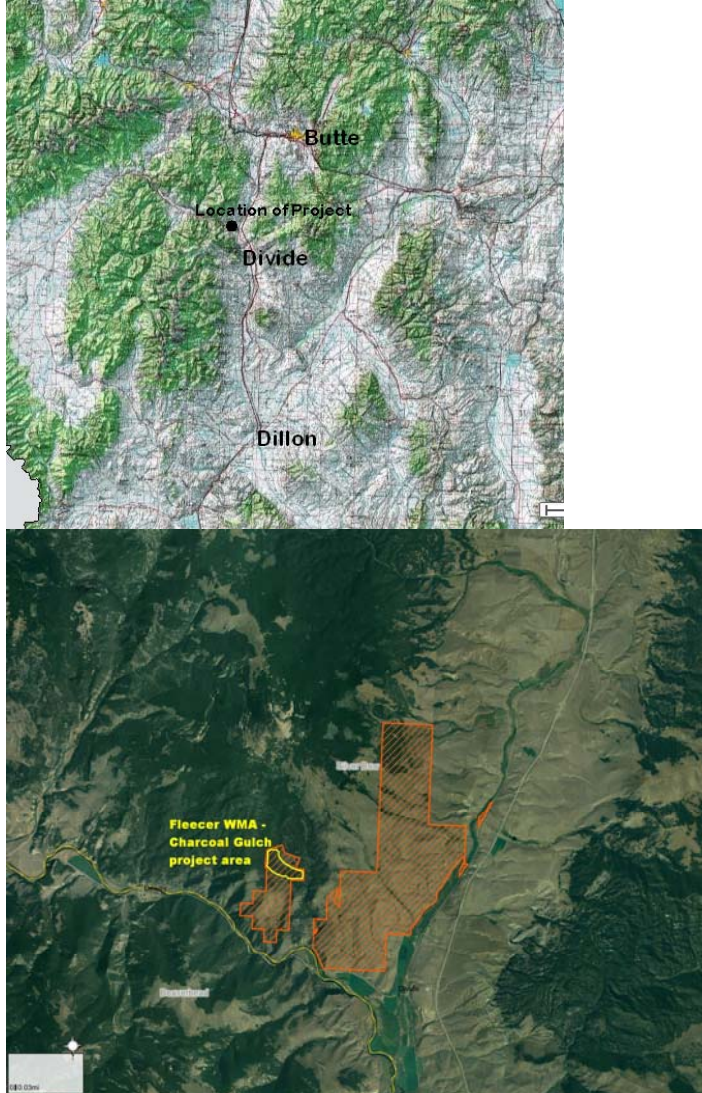


Figure 2: Location of the proposed project, (overview on the top, close-up on the bottom).

### **1.3 Objectives of the Proposed Action**

- 1.3.1 Objective 1: Restore productivity to decadent aspen stands by removing competing conifers.
- 1.3.2 Objective 2: Prevent loss of sagebrush habitat by removing encroaching conifers.
- 1.3.3 Objective 3: Improve Douglas-fir forest health by selectively thinning stands impacted by insects, disease, and overcrowding.
- 1.3.4 Objective 4: Minimize the potential impacts of wildfire to critical big game winter range by generally reducing fuels throughout the area.

## **1.4 Relevant Plans and Authority**

### **1.4.1 Section 87-1-201 (iv), Montana Code Annotated (MCA)**

Section 87-1-201 (iv), MCA requires FWP to address fire mitigation and wildlife habitat enhancement, giving priority to forested lands in excess of 50 contiguous acres in any state park, fishing access site, or wildlife management area under the department's jurisdiction.

### **1.4.2 Section 87-1-201, MCA**

Section 87-1-201, MCA gives FWP the authority to protect, enhance, and regulate the use of Montana's fish and wildlife resources for public benefit now and in the future. Habitat improvements as proposed in this assessment would enhance native plant communities so that they continue to support game and other wildlife species for the public to enjoy.

### **1.4.3 Montana Fish, Wildlife & Parks Commission Deer Management Policy (1998)**

This policy, penned and adopted by the FWP Commission in 1998, emphasizes protection and enhancement of mule deer habitats as one of three key components to managing for the long-term welfare of Montana's deer resource. This project as proposed would enhance approximately 145 acres of important mule deer winter range.

### **1.4.4 Montana Statewide Elk Management Plan (2004)**

One goal specified in FWP's 2004 Elk Management Plan promotes improvement of elk habitat by maintaining vegetative diversity. The proposed project would work toward this by promoting retention of aspen and sagebrush-grassland stands through the removal of encroaching Douglas-fir on critical winter range.

### **1.4.5 Montana Department of Fish, Wildlife and Parks Comprehensive Fish and Wildlife Conservation Strategy (2005)**

Under this conservation strategy, wildlife species have been assigned levels of conservation need. Tier 1 indicates species in greatest conservation need. FWP has identified these species as top priorities for conservation actions. Tier 2 indicates species of moderate conservation priority. The following is a list of Tier 1 and Tier 2 species that may occur within the proposed project area and would benefit from habitat improvements to deciduous, sagebrush and conifer forest communities.

Common Name	Scientific Name	Tier	Habitat
Wolverine	<i>Gulo gulo</i>	2	Boreal Forest and Alpine
Fringed Myotis	<i>Myotis thysanodes</i>	2	Riparian and Dry Mixed Conifer
Hoary Bat	<i>Lasiurus cinereus</i>	2	Riparian and Forested
Northern Goshawk	<i>Accipiter gentiles</i>	2	Mixed Conifer
Pileated Woodpecker	<i>Dryocopus pileatus</i>	2	Moist Conifer
Brown Creeper	<i>Certhia americana</i>	2	Moist Conifer
Brewer's Sparrow	<i>Spizella breweri</i>	2	Sagebrush
Green-tailed Towhee	<i>Pipilo chlorurus</i>	2	Shrubland
Western Toad	<i>Anaxyrus boreas</i>	1	Wetlands

## 1.5 Overlapping Jurisdiction

### 1.5.1 Name of Agency and Responsibility

- a. Montana State Historic Preservation Office – Cultural and Historic Resources
- b. Silver Bow County – Weed Management

## 1.6 Decision

Based on his review of the project as well as public comment, FWP's Region 3 Supervisor would decide whether or not to approve this habitat improvement project for the Charcoal Gulch area of Fleecer WMA.

## 2.0: ALTERNATIVES

**2.1 Alternative A (Proposed Action):** Remove expanding Douglas-fir (DF) from aspen and sagebrush communities and thin DF forest, within designated stands in the Charcoal Gulch area of Fleecer WMA.

Site-specific project map is shown in *Appendix A*.

The following treatments are being proposed:

Aspen Treatment – Remove DF ( $\leq 8''$  dbh) from within aspen stands and from a 100' buffer around the stand. DF would be felled and left on site, with larger trees being lopped and scattered. Approximately 25 acres would be treated.

Sagebrush Treatment: Remove DF ( $\leq 8''$  dbh) from within sagebrush stands. DF would be felled and left on site, with larger trees being lopped and scattered. Approximately 70 acres would be treated.

Douglas-fir Forest Treatment: In select stands of DF, thin the number of trees by 15%. Specifically, select for removal those DF that are 1) dead and  $\leq 14''$  dbh; or 2) live yet unhealthy and  $\leq 8''$  dbh. Felled trees would be lopped and scattered. Approximately 50 acres would be treated.

Tree removal would occur during late summer and early fall to avoid disturbance during the calving, fawning, and ground-nesting period and to ground-nesting birds. Strict adherence to Montana's Forestry Best Management Practices (BMPs) and Streamside Management Zone (SMZ) law would reduce potential impacts to water quality and prevent increased sediment flows to Charcoal Creek. Tree removal would be by hand. Operations would be suspended during wet conditions when the ground is more susceptible to disturbance or if conditions are extremely dry and fire danger is high. Relic 2-track roads exist in the project area and would be used where possible to access cutting units. However, some units would need to be accessed via off-road travel but would be limited to OHV vehicles only.

All guidelines and recommendations for managing noxious weeds in FWP's Integrated Noxious Weed Management Plan (2008) would be adhered to. These include:

1. Surveying the proposed project area prior to tree removal and thinning operations and identify noxious weeds, map them, and attempt to control them by a combination of mechanical, biological or chemical methods. The project area would be revisited a minimum of three years post-logging, and treated for weeds as needed.
2. Power washing any vehicles and equipment prior to its arrival on the WMA.
3. Seeding any areas disturbed by logging activity with a native seed mixture appropriate for the area immediately upon completion of the harvest operation.

Estimated cost of this project is \$46,000.

- Aspen Treatment:
  - Approximate acreage to be treated: 25
  - Approximate cost: \$7,500 (\$300/acre)
- Sagebrush Treatment:
  - Approximate acreage to be treated: 70
  - Approximate cost: \$21,000 (\$300/acre)
- Douglas-fir Forest Treatment
  - Approximate acreage to be treated: 50
  - Approximate cost: \$15,000 (\$300/acre)
- Weed Treatment
  - \$2,000

Funding is expected to come from a few different sources. Grant applications have been submitted to the Mule Deer Foundation and the Rocky Mountain Elk Foundation. Department funding would come from FWP's Forest Management account created by the 2009 Legislature in House Bill 42.

**2.2 Alternative B:** Remove Douglas-Fir from Aspen and Sagebrush stands only. Do not thin Douglas-Fir forest stands.

Under this alternative, habitat improvements would occur only within the aspen and sagebrush communities designated in Charcoal Gulch. Treatments and specifications would be the same as those listed in Alternative A. However, no thinning would occur within any DF forest stands.

Estimated cost of this alternative would be the same as Alternative A minus the costs for the Douglas-fir Forest Treatment, i.e. \$31,000.

**2.3 Alternative C (No Action):** Implement No Forest Management Activities and Status Quo is Maintained on the WMA.

FWP would not conduct any habitat improvement projects in the Charcoal Gulch area of Fleecer WMA under this alternative. FWP would continue to manage the WMA for the benefit of wildlife and recreation activities. FWP would continue noxious weed management activities within the WMA.

### **3.0: AFFECTED ENVIRONMENT**

#### **3.1 Description of Relevant Pre-Existing Factors**

The proposed project area has been identified as critical elk and mule deer winter range since at least the 1950's. The Fish & Game Department (precursor to FWP) purchased the Charcoal Gulch area of Fleecer WMA in 1962 because of its winter range values. Over the past century, fire suppression and climatic conditions have allowed Douglas-fir to expand into sagebrush and aspen stands. A human-caused fire that began at the mouth of Charcoal Gulch in August 2008 burned a relatively small portion of the area on private and BLM-administered land before it was quickly extinguished.

#### **3.2 Description of Relevant Affected Resources**

##### **3.2.1 Soil & Geologic**

The project area is located at the southern base of Fleecer Mountain. It is located on Tertiary basin fill which are deep deposits of sediment comprised of gravel, sand, mud, volcanic ash, limestone and/or coal. Quaternary alluvium eroded from the surrounding mountains covers the basin fill in areas of recent deposition (e.g. streambeds).

Soils are primarily Mollisols, which generally form under a grassland cover in semi-arid to semi-humid areas with temperate climates. Mollisols have a nutrient-enriched surface soil, which results from the long-term addition of organic materials derived from plant roots. Their fertility makes them prime candidates for agricultural use.

##### **3.2.2 Air & Noise**

The Charcoal Gulch area of Fleecer WMA is just north of the Big Hole River and is surrounded by BLM and Forest Service (FS) lands. There is a 2-mile primitive road that accesses the



property from Highway 43. The area receives minimal use during the summer and heavy use during the hunting season. Because it is critical winter range, the Charcoal Gulch portion of the WMA is closed to all travel (motorized and non-motorized) from December 2<sup>nd</sup> – May 15<sup>th</sup>. The surrounding FS and BLM land is open for non-motorized travel during this time. Ambient air quality is good and noise levels are limited to those times when motorized recreationists are in the area.

### 3.2.3 Water & Fisheries

Charcoal Gulch flows through the project area before joining with Charcoal Creek and flowing into the Big Hole River. Although it is designated a perennial stream, water flows can be minimal to non-existent during hot, droughty summers. While FWP has not conducted surveys in this body of water, it is highly unlikely that the stream supports a fishery given its irregular flows (J. Olsen, pers. comm.). Several springs occur in the area.

### 3.2.4 Vegetation

The Charcoal Gulch area of Fleece WMA is a mosaic of grassland, sagebrush, aspen, and dry Douglas-fir communities transected by riparian areas of willow communities along Charcoal Gulch. Aspen stands are comprised mainly of pole-sized trees with a medium-high stocking level. Several stands show a high degree of decadence. Sagebrush stands are fairly continuous and healthy, with multiple age classes represented. Douglas-fir forests are dry with very little undergrowth. Trees are mostly pole and saw-log sized with a medium-high stocking level. Some insect infestation is present. Grasses in this area are primarily bluebunch wheatgrass, prairie junegrass, and Idaho fescue while the forb community mainly consists of lupine, arrowleaf balsamroot, and yarrow.

### 3.2.5 Wildlife

Fleece WMA provides important seasonal habitat for several big game species including elk, mule deer and antelope. In addition, many other species are known to use the WMA year-round, seasonally, or occasionally, including: moose, black bear, mountain lions white-tailed deer, wolf, coyote, bobcat, beaver, various bird species and small mammals, and several reptile species including prairie rattlesnakes.

Fleece WMA is located in Antelope Hunting District 319. The population in this district has grown from several dozen in the 1970's to 150-200 today. Almost all of the population in this district winters on Fleece WMA and the surrounding area. Of these, 50-70 usually make Fleece area their home year-round.

Fleece WMA is located in Deer/Elk Hunting District 319. Current mule deer populations in Hunting District 319, which contains Fleece WMA, are at low but increasing levels. During the annual spring aerial survey in 2013, 480 mule deer were observed, up from 368 the previous year. The high count in recent years was 747 in 1999. Because of the rocky outcroppings, good shrub cover and southern exposure, mule deer tend to congregate at the southern end of Fleece WMA, including Charcoal Gulch, during winter. Throughout the rest of the year, mule deer use the surrounding forested areas for fawning and summering. Locally, Charcoal Gulch is a popular hunting spot for mule deer and is where several young hunters have had their first success.



Elk populations in the Fleecer area are increasing. Recent surveys indicate 882 observed elk in Hunting District 319, up from 593 in 2009. Montana's Elk Management Plan (FWP 2005) states the population objective for Hunting District 319 as a maximum of 1,100 elk with  $\leq 800$  wintering on Fleecer WMA and the surrounding public and private land. A recent ground survey indicated 710 elk in one large group plus an additional 60-100 elk in another group that could not be readily observed. The large group represents migratory elk that winter on Fleecer and summer as far away as Pintler Creek in the Upper Big Hole. The smaller group is a resident herd that utilizes the Fleecer area year-round.

A small mammal survey was conducted in Charcoal Gulch in June 2011. The more common species identified include deer mice, meadow voles, and montane voles, along with eight other small mammal species. A survey for pygmy rabbits was conducted on Fleecer WMA, including Charcoal Gulch, in the winter of 2011. No evidence of this mammal was found.

A comprehensive year-round bird survey was conducted on Fleecer WMA in 2010-2011. Eighty-five individual species were observed. Results from that survey can be found in the form of a downloadable birders checklist located on the FWP website at <http://fwp.mt.gov/fwpDoc.html?id=53772>.

#### 3.2.6 Aesthetics

The proposed project area would only be visible to recreationists in the actual treatment area. It would not be visible from any roads or highways. The Charcoal Gulch area of Fleecer WMA offers a natural landscape of native vegetation in a large tract of undeveloped land.

#### 3.2.7 Cultural & Historic

The Charcoal Gulch area of Fleecer WMA was privately owned until the department purchased it in 1962. A single family home was built on the land and inhabited year-round, despite the deep snow in winter. The house was burned down soon after the land was purchased by the department. The foundation still exists, along with a single log cabin and derelict outhouse.

#### 3.2.8 Recreation

Fleecer WMA is open for public recreation from noon on May 15<sup>th</sup> – December 1<sup>st</sup>. The area provides public recreational opportunities such as hunting, hiking, camping, horseback riding, horn-hunting and wildlife viewing. The WMA is closed for all travel/recreation December 2<sup>nd</sup> – noon May 15<sup>th</sup> to provide security for wintering big game.

#### 3.2.9 Health Risks/Hazards

There are inherent risks associated with tree-felling activities which would be mitigated by having only trained professionals conduct these activities.

Prairie rattle snakes occupy the Charcoal Gulch area and pose a safety risk to persons working in this area.

FWP often uses chemical herbicides to manage noxious weed infestations. There is the potential for spillage to occur when pouring chemicals. Only trained and licensed staff or contractors

would apply the herbicides to specified areas within the WMA to decrease the chance of negative consequences to native vegetation.

#### 3.2.10 Community Resources

There are several private residences located along the access road to the WMA in Charcoal Gulch. A small power substation owned by Northwestern Energy is located at the mouth of Charcoal Gulch on the Big Hole River. These locations are accessed via Highway 43.

### **4.0: ENVIRONMENTAL CONSEQUENCES**

#### **4.1 Description of Relevant Affected Resources**

##### 4.1.1 Soil & Geologic

##### *Predicted Consequences of Alternative A*

Tree removal is expected to occur during the summer and fall when the ground is snow-free and dried out. Off-road travel with OHV's would occur throughout the project area in order to transport tools, equipment and personnel. The ground may be susceptible to erosion and compactions from OHV use. However, ground disturbance would be mitigated by utilizing existing 2-tracks where possible and avoiding areas that are wet or have thin soils. Work would not be conducted when conditions are wet. Because trees would be lopped and scattered, soil disturbance and compaction associated with skidding and decking operations would not be present.

Any substantially disturbed areas would be reseeded with native grasses and forbs to reduce new erosion patterns from becoming established. Any invading noxious weeds would be managed through implementation of FWP's Integrated Noxious Weed Management Plan.

FWP would meet the requirements of the Streamside Management Zone Law (MCA 77-5-301) which protects stream channels and banks and prohibits streamside activities that would diminish riparian habitat values.

There would be no short- or long-term effects on the overall geologic substrate.

##### *Predicted Consequences of Alternative B*

There would be the same impacts as described for Alternative A under Alternative B although fewer acres. No work would be conducted within the Douglas-fir forest stands.

##### *Predicted Consequences of Alternative C*

If the No Action alternative were chosen, no disturbance to the current soil conditions would occur from tree removal activity.

#### 4.1.2 Air & Noise

##### *Predicted Consequences of Alternative A*

Equipment used during tree removal would create noise, dust and emissions. This project would occur during the summer when visitation to Charcoal Gulch is minimal. Contracted workers would be exposed to intermittent noise levels that would require the use of hearing protection. All generated noise and emissions are temporary and would cease at the completion of the tree removal activities.

##### *Predicted Consequences of Alternative B*

There would be noise and emissions from logging activities under Alternative B similar to Alternative A, but for a shorter extent and duration since the tree removal would be significantly less under this alternative.

##### *Predicted Consequences of Alternative C*

Ambient air quality and noise level would remain at the current levels if the No Action Alternative were chosen.

#### 4.1.3 Water & Fisheries

##### *Predicted Consequences of Alternative A*

Because tree removal would be done by hand, there would be minimal erosion and sediment into Charcoal Gulch resulting from this project. Off-road motorized travel would be necessary to access portions of the project area and crossing Charcoal Gulch would occur. Erosion and sediments could occur from this. To minimize impacts, crossings would be limited to hardened sites and wet areas around springs would be restricted to foot travel only. Since felled trees would be lopped and scattered instead of dragged to slash piles, there would be no need for skid trails that could cause erosion. Areas disturbed by this project would be reseeded with appropriate native grass/forb seed mixtures to reduce chances for erosion. Strict adherence to Montana's Forestry BMPs and SMZ law would additionally reduce potential impacts to water quality and help prevent increased sediment flows to creeks in the project area. Operations would be suspended when conditions are wet and the ground is more susceptible to disturbance.

##### *Predicted Consequences of Alternative B*

This alternative is similar to Alternative A except disturbance would be lessened by the smaller scope of the project under Alternative B.

##### *Predicted Consequences of Alternative C*

Under the No Action Alternative, there would be no temporary OHV use in the area, including creek-crossings, to cause erosion or sedimentation in the creek.

#### 4.1.4 Vegetation

##### *Predicted Consequences of Alternative A*

The effects of this project are expected to restore productivity to decadent aspen stands by removing competing conifers, prevent loss of sagebrush habitat by removing encroaching

conifers, improve forest health by selectively thinning Douglas-fir stands impacted by insects, disease, and overcrowding, and generally minimize the impacts of wildfire by reducing fuels throughout the area. Some vegetation would be damaged from off-road motorized travel. There is a possibility for the introduction of noxious weeds in disturbed soils as this project is implemented. As a preventative measure, project areas would be inventoried and treated as needed for weeds prior to tree removal and for a minimum of three years post-logging. All vehicles and equipment would be washed before coming on-site to minimize the spread of noxious weed seed. Disturbed soils would also be reseeded with appropriate native grasses and forbs upon completion of the project. Weed treatment would adhere to the guidance of FWP's Integrated Noxious Weed Management Plan.

#### *Predicted Consequences of Alternative B*

This alternative is similar to Alternative A except that the Douglas-fir forest stands would not receive the ecological benefit of being thinned and forest fuels reduction would be less than if the full project as proposed were carried out. Less vegetation would get damaged from OHV travel since less area would be treated.

#### *Predicted Consequences of Alternative C*

Under the No Action Alternative, aspen stands would continue to be overtaken by Douglas-fir trees which are expected to outcompete aspen for resources. Sagebrush stands would shrink in acreage from conifer expansion. Insect infestations and competition for resources would have a greater impact on Douglas-fir forests due to densely stocked stands. Wildfires burning through the area would potentially burn hotter and longer due to a greater fuel load, thereby increasing the threat to the more desirable vegetation on this critical winter range.

### 4.1.5 Wildlife

#### *Predicted Consequences of Alternative A*

The proposed action would benefit big game as well as other wildlife species in the Charcoal Gulch area of Fleecer WMA by improving habitat conditions on critical winter range and reducing wildfire fuel loads in the area. Mule deer would benefit from the retention of sagebrush stands, as well as numerous songbird species, including green-tailed towhee and Brewer's sparrow (both are Tier 2 species), prairie rattlesnakes, cottontails, and several small mammals and rodents. Vigorous, multi-age aspen habitat would benefit elk, moose, black bear, ruffed grouse, and numerous bird species that nest either in cavities or branches of aspen, including the Pileated woodpecker (Tier 2 species). Douglas-fir forests that are healthier, more mature trees would provide important thermal- and hiding cover for deer and elk. In addition, these forests could also provide important habitat for the Northern Goshawk (Tier 2 species), which prefer mature forests with relatively little undergrowth.

The proposed actions of this alternative are not anticipated to cause wildlife any lasting negative impacts. The work would be completed in a limited area, be brief in duration, and occur during the summer when wildlife are less stressed by seasonal conditions. Wildlife can easily disperse from the treatment area until the work is completed. However, there is the potential for disturbance to ground- nesting birds from OHV travel throughout the project area. To minimize this, work would occur after July 15<sup>th</sup> in order to avoid the main portion of nesting season for

tree- and ground-nesting birds. The smaller trees that would be removed are not likely to be conducive for supporting nests while the more mature Douglas fir trees to be retained to provide better nesting habitat and better bark foraging conditions.

#### *Predicted Consequences of Alternative B*

Impacts from Alternative B would be similar to Alternative A except there would be no long-term benefits realized from thinning the Douglas-fir forest. Given the current medium-high stocking level, an insect infestation could impact a large number of conifer trees, resulting in a high degree of mortality.

#### *Predicted Consequences of Alternative C*

Under this alternative, FWP would continue to manage the WMA for the benefit of wildlife and outdoor recreation. Ungulate populations would continue to be monitored and hunting opportunities would be adjusted as needed. None of the benefits listed in Alternative A would be realized.

### 4.1.6 Aesthetics

#### *Predicted Consequences of Alternative A*

There would be temporary effects to the visual quality of the project area for a few years post-treatment as lopped and scattered conifers break down. Stumps would be cut to a maximum of 6 inches in height to lessen visual impacts and to minimize hindering wildlife movement.

#### *Predicted Consequences of Alternative B*

Similar to Alternative A except that the visual impacts would be limited to the aspen and sagebrush stands only.

#### *Predicted Consequences of Alternative C*

Under the No Action Alternative, there would be no visual impacts from felled trees that have been lopped and scattered.

### 4.1.7 Recreation

#### *Predicted Consequences of Alternative A*

The project would be implemented during the summer when visitation to the Charcoal Gulch area of Fleecer WMA is minimal. Work is expected to be completed by the start of archery season when use of the area increases significantly. Recreationists may be impacted by project-associated traffic on the access road and tree-felling activity in the area. Negative impacts would be temporary due to the relatively short duration of activity. Forestry activity would be restricted to weekdays and daylight hours to further minimize disturbance.

#### *Predicted Consequences of Alternative B*

Same as Alternative A except impacts would be for a shorter duration since the project is smaller in scope under Alternative B.

#### *Predicted Consequences of Alternative C*

The public's access to the WMA for recreational activities would go on as usual.

#### 4.1.8 Cultural & Historic

##### *Predicted Consequences of Alternative A*

While there is an old home site, log cabin and relic outhouse in Charcoal Gulch on the WMA, no impacts to these resources are anticipated since tree-removal activities would not occur in close proximity to these sites. No significant ground disturbing activities will take place to affect cultural or historical artifacts.

##### *Predicted Consequences of Alternative B*

Same as Alternative A.

##### *Predicted Consequences of Alternative C*

FWP would continue to be proper stewards of the State's cultural and historic resources on state-owned lands per the requirements of state law MCA 22-4-424 and 22-4-435 MCA.

#### 4.1.9 Hazards / Risks

##### *Predicted Consequences of Alternative A*

This project would create temporary hazards associated with tree falling. Professional personnel, knowledgeable in safety practices and procedures, would be employed to carry out this project. The threat of fire ignition caused by equipment would be mitigated by suspending the operation during times of high fire danger. Recreationists in the project area during the time of tree removal would have to be mindful of tree-felling operations in order to avoid injury.

Traffic on the access road to Charcoal Gulch would temporarily increase. This is a narrow dirt road where passing is difficult. Contractors would be informed of this and instructed to use caution when traveling this road. Local residents living along the access road would be kept informed of activity in the area.

Professional personnel working in the project area would be informed of the potential to encounter prairie rattle snakes and advised to wear appropriate protective clothing.

Herbicide application would create minor, temporary hazards during the treatment for noxious weeds. Herbicide application would be conducted by state-certified applicators and would follow all pertinent laws and restrictions.

##### *Predicted Consequences of Alternative B*

Similar to Alternative A except that the impacts would be shorter in duration since the project is smaller in scope.

##### *Predicted Consequences of Alternative C*

Under the No Action alternative, FWP would continue to manage noxious weeds within the WMA per the guidance of FWP's Integrated Noxious Weed Management Plan. The application

of herbicides would be conducted by state-certified applicators and would follow all pertinent laws and restrictions.

#### 4.1.10 Community Resources

##### *Predicted Consequences of Alternative A*

A temporary increase in traffic on the access road to Charcoal Gulch would be associated with this project and might inconvenience local residents and recreationists to the WMA. To minimize this, the project would be completed in as short a time period as possible

##### *Predicted Consequences of Alternative B*

Alternative B is similar to Alternative A except the period of increased traffic associated with the project and disturbance to recreationists and local residents would be shorter since the project is smaller in scope.

##### *Predicted Consequences of Alternative C*

There would be no change in the community resources bordering the WMA if the No Action alternative was selected. The traffic patterns would remain at their normal levels.

## **5.0 MONITORING & LONG-TERM MANAGEMENT**

FWP's Butte Area wildlife biologist would oversee the implementation of this project. In compliance with FWP's Integrated Noxious Weed Management Plan, the project area would be inventoried and treated for weeds prior to the project, and monitored and treated for weeds for a minimum of three years post-project completion. Any areas disturbed during this project would be reseeded with native seed mixtures appropriate for the area. Long-term monitoring of habitat conditions via permanent photo plots would occur to ensure that project objectives are being met.

## **6.0 POTENTIAL LONG-TERM CONSEQUENCES**

There is the potential for several positive long-term ecological consequences with the removal of Douglas-fir as proposed in this project. First, aspen stands should expand in size and vigor once competing Douglas-fir trees are removed. This response in vegetation would benefit elk, moose, deer, ruffed grouse and a variety of other bird species that nest in or forage on aspen. Secondly, sagebrush communities would remain intact and possibly expand in size with the removal of Douglas-fir trees. Mule deer, sagebrush-obligate songbirds such as the Brewer's sparrow and other sagebrush community wildlife species would benefit from the retention of this habitat type. Thirdly, reducing the stocking level of Douglas-fir forest stands would increase the overall health and vigor of the forest community and reduce the threat of insect infestations where trees are currently densely stocked. Lastly, reducing some of the fuels in this area of critical winter range would help to reduce the threat of wildfire and give some level of protection to more desirable habitats. It is highly likely that Douglas-fir trees would resprout in areas that have been cleared, and another treatment effort would need to be conducted in the future.



## **7.0 PUBLIC PARTICIPATION AND COLLABORATORS**

### **7.1 Public Participation**

This project has been discussed with the Skyline Sportsmen Association and local residents in the Divide/Charcoal Gulch area.

The public would be notified in the following manner to comment on this draft EA:

- Two public notices in each of these papers: *The Montana Standard* (Butte) and *The Independent* (Anaconda)
- One statewide press release
- Direct mailing to adjacent landowners and interested parties, and
- Public notice on the Fish, Wildlife & Parks web page: <http://fwp.mt.gov>.

Copies of the draft EA will be available for public review at FWP Region 3 Headquarters and at the FWP Butte Area Resource Office.

This level of public notice and participation is appropriate for a project of this scope.

The public comment period will extend for (30) thirty days. Written comments will be accepted until 5:00 p.m., May 9, 2014 and can be mailed to the address below:

Charcoal Gulch Habitat Project  
Montana Fish, Wildlife & Parks  
1820 Meadowlark Lane  
Butte, MT 59701

Or email comments to: [vboccadori@mt.gov](mailto:vboccadori@mt.gov). Please put “EA Comment” in the subject line.

### **7.2 Collaborators - Other Agencies/Offices that Contributed to the EA**

Montana Department of Fish, Wildlife & Parks: Fisheries, Legal, and Wildlife  
Montana State Historic Preservation Office

## **8.0 ANTICIPATED TIMELINE**

Public Comment Period of EA: April 9-May 9, 2014

Decision Notice: May 20, 2014

Request for Proposal (RFP) for Contractor published by: June 15, 2014

Project Bid Solicitation and Award of Contract by: July 1, 2014

Initiation of Project by: August 1, 2014

Completion of Project: August 31, 2014

## **9.0 DETERMINATION IF AN ENVIRONMENTAL IMPACT STATEMENT IS REQUIRED**

Based upon the above assessment, which has identified a limited number of minor impacts to the physical and human environment that will be either for a short duration or that the effects of the proposed project can be mitigated below the level of significance, an EIS is not required and an environmental assessment is the appropriate level of review.

The removal of Douglas-fir trees expanding into aspen and sagebrush stands and thinning of Douglas-fir forests will be beneficial to the wildlife in this area as it improves existing habitat conditions on critical big game winter range. The brief duration of the project will limit the impacts to wildlife and the recreating public.

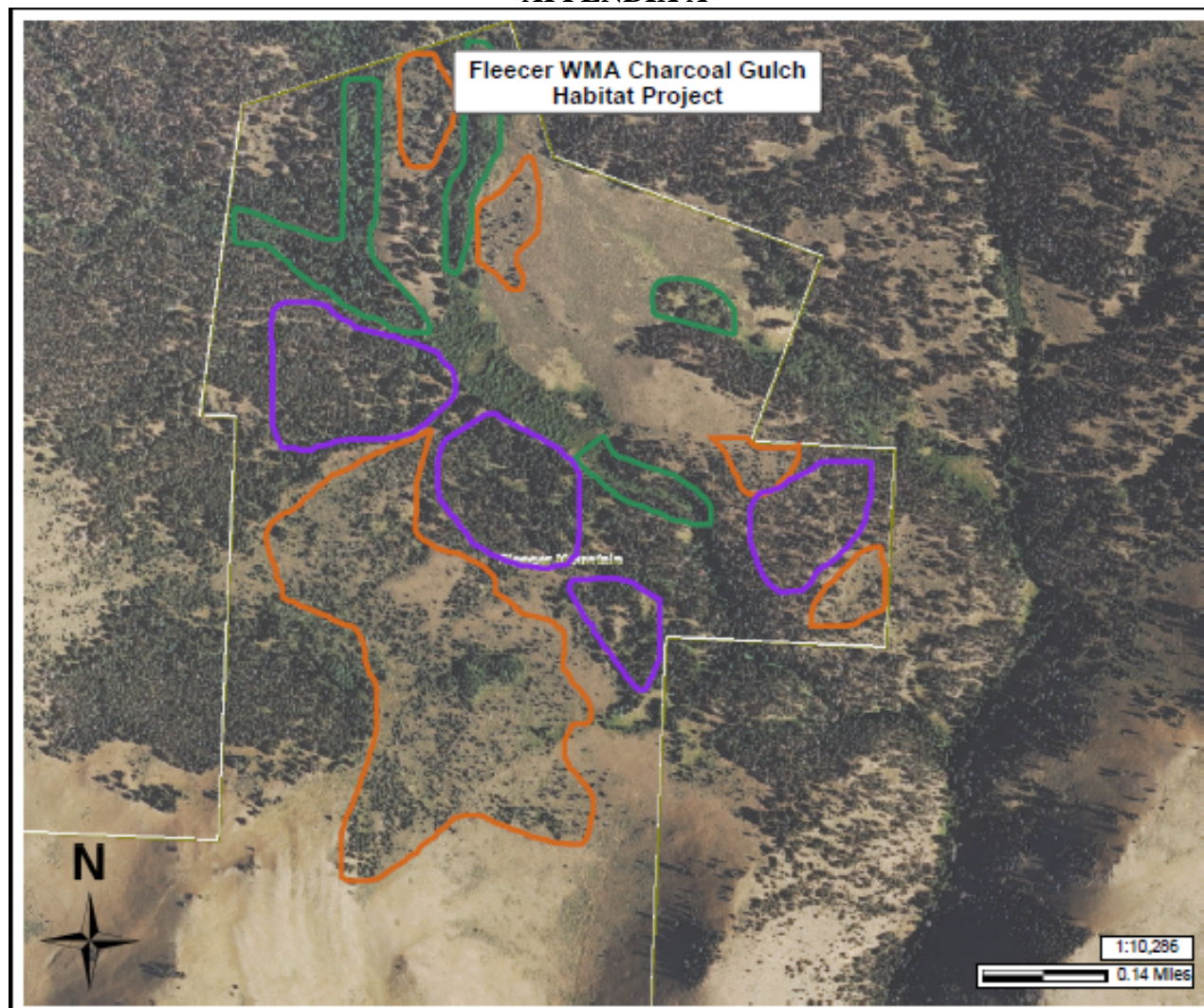
## **10.0 EA PREPARER**

Vanna Boccadori, FWP Wildlife Biologist Butte, MT

## **REFERENCES**

- Montana Fish, Wildlife, & Parks: Comprehensive Fish and Wildlife Conservation Strategy, 2005.
- Montana Fish, Wildlife & Parks: Fleecer Interim Management Plan, 1980.
- Montana Fish, Wildlife & Parks: Integrated Noxious Weed Management Plan, 2008.
- Montana Fish, Wildlife & Parks: Statewide Elk Management Plan, 2005.
- Montana Fish, Wildlife & Parks Commission: Deer Management Policy, 1998.
- Rogers, R. 1979. Winter elk use patterns in Charcoal Gulch. FWP files, Butte, MT.

## APPENDIX A



**Purple** - Douglas-fir forest stand units (~50 acres)  
**Green** - Aspen stand units (~25 acres)  
**Orange** - Sagebrush stand units (~70 acres)  
The light colored line represents the WMA boundary.